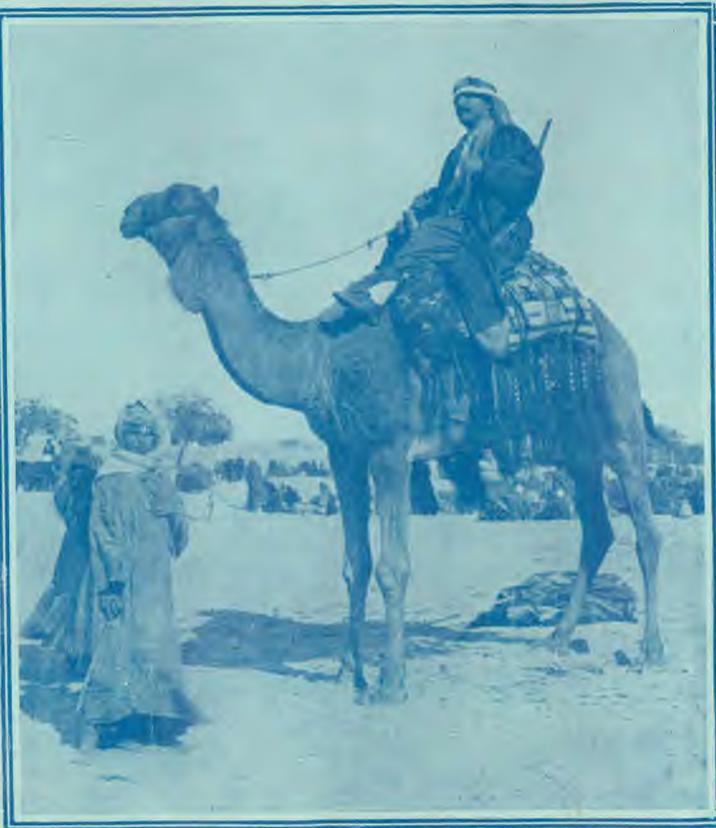


# Herald of Health



Vol. 3

SEPTEMBER, 1912

No. 9

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# CONTENTS

Articles	Page
<b>EDITORIAL</b>	
Advances in Surgery .. .. .	171
Unconscious Nervousness .. .. .	171
A Counterfeit for the Genuine .. .. .	172
<b>GENERAL ARTICLES</b>	
How to Prevent Boils .. .. .	173
Food Reform .. .. .	175
Animal and Vegetable Food .. .. .	175
Massage in Disorders of Digestion .. .. .	176
Thanatopsis .. .. .	177
The Fly as a Disease Carrier .. .. .	178
Look Pleasant, Please .. .. .	180
Correcting Heredity .. .. .	180
<b>ANATOMY AND PHYSIOLOGY</b>	
The Circulatory System .. .. .	181
International Tuberculosis Congress .. .. .	182
<b>HEALTHFUL COOKERY</b>	
The Coco-nut .. .. .	183
Recipes .. .. .	184
<b>MOTHER AND CHILD</b>	
What a Child Should Know .. .. .	185
The Diet of a Nursing Mother .. .. .	185
The Choice of a Helpmeet .. .. .	186
The Child of To-day, the Man of Tomorrow .. .. .	187
<b>ABSTRACTS</b>	
Small Pox and Vaccination—Best Time to Become a Parent .. .. .	189
Sleeplessness and Its Treatment—Treatment of Leprosy .. .. .	190
<b>PRACTICAL HOME TREATMENT</b>	
Moist Abdominal Bandage .. .. .	191
<b>NEWS NOTES</b>	192

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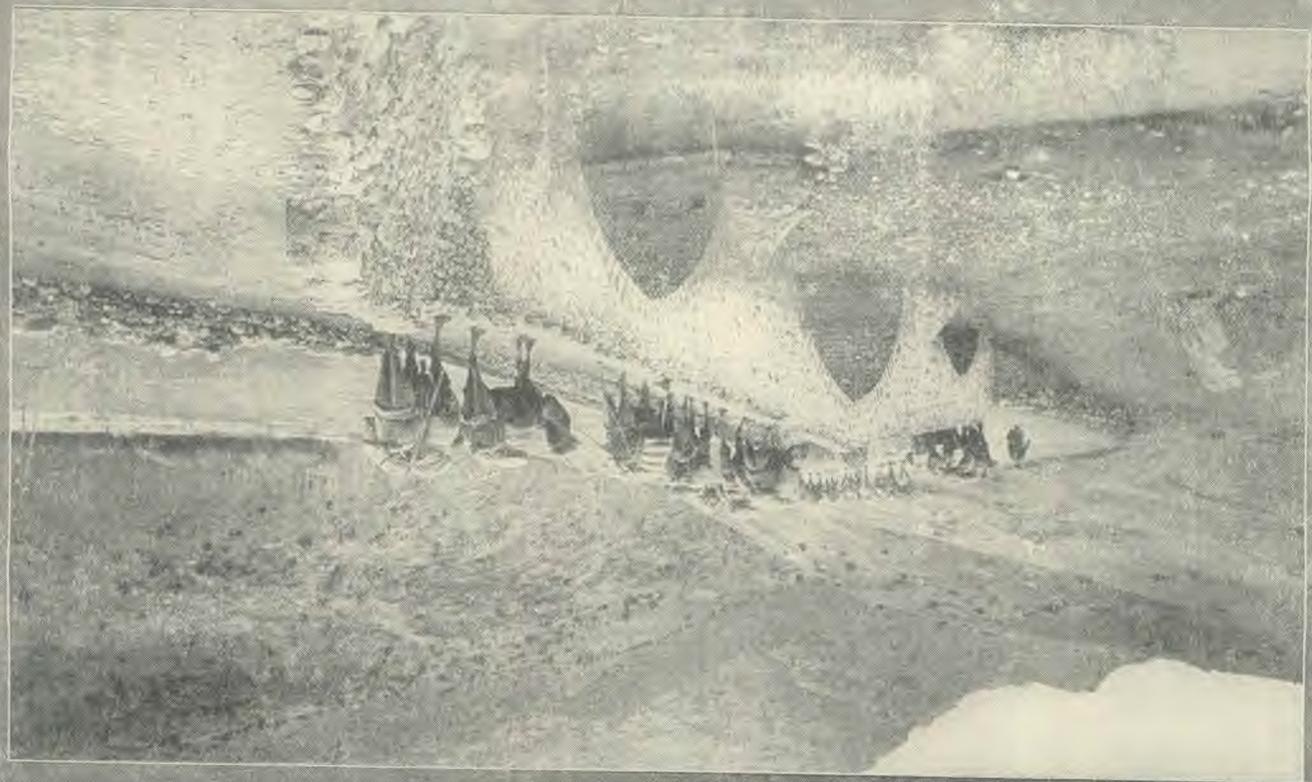
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# HERALD OF HEALTH

The Indian Health Magazine.

V. L. Mann, M. D., Editor

S. A. Wellman, Asso. Editor.

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## Editorial

### ADVANCES IN SURGERY

THE discovery of the germ theory as the cause of disease, and of drugs that have the property of killing the germs, has made it possible to do much advance work in surgery. Before these discoveries surgery was used as a last resort and then with the likelihood of death. Now many lives are saved by an early resort to the knife. Surgery is used with but little more danger to life than internal medicine.

This branch of medicine has been criticised because of the unnecessary cutting done by some surgeons. But this ought not to be a hindrance to the use of this remedial agent in this day and age, as the best surgeons are the most conservative, and use their speciality only when they know that it is the best thing for the welfare of the patient.

Much work has been done in bone surgery. Patients whose bones become united by disease, causing a stiffness of the joint, have quite a useful limb restored to them. The stiff joint is taken and the two bones separated with a chisel; then the contour of a new joint is worked out. The ends of the bones are brought together, retained with a plaster paris cast, and with proper after treatment very good use of the joint is obtained.

When some of the long bones become diseased by tuberculosis or some other chronic disease which destroys much of the bone, all of the diseased bone is cut away,

and transplanted bone is made to take its place, just as the limb of one tree can be grafted on another tree. Sometimes nearly the whole of one of the long bones may be transplanted in this way.

Another feat of the surgeon is the removal of a chronically diseased kidney, which is replaced by a kidney from another body. This is a very complicated work as all of the relations of the organ have to be severed, and these same relations have to be renewed or reproduced in the normal kidney that is transplanted. The delicacy of this operation is all the more apparent when we consider the importance of the function of the kidney.

Other operations that try the skill of the surgeon are operative work on the brain and spinal cord, sewing up the wounds of the heart, renewing the continuity of severed blood vessels, nerves, muscles and tendons.

### UNCONSCIOUS NERVOUSNESS

The word nervous has become almost proverbial. It is really striking the amount of nervousness that exists to-day among the people. The causes of this condition are legion. We can group under two general headings most of these causes, viz., the lessening of the general resistance by living in disobedience to the laws of nature, and increased activity in the world to-day. Under the first heading we group

indiscretions in diet, lack of exercise, impure air, use of tea, coffee, tobacco, pan, alcohol and sexual excess. The second group causes one to think of increased speed in travel by rail and boat, and the dangers attending this speed, more machine-made articles, which are turned out with greater rapidity. The greater responsibility and tension connected with the working among so much machinery, often taking the life of man. These increases call up greater and more perplexing problems for the financier, and more figures for the clerks or bookkeepers. These are a few of the points under the two general headings leading to neurasthenia, nervous prostration, and other affections, with a lowered nerve tone.

One thing that is very common in these conditions is unconscious nervousness. The individual is so nervous at times that he is under great tension and is worrying about everything, both trivial and great, and yet does not realize it. You question such a patient, and he will invariably declare that he does not worry. The one who worries and does not know it, is the hardest to raise above his troubled thoughts as he will keep right on worrying being unaware of it. The habit of unconscious worry, for a habit it is oft-times, can be conquered like any other habit. If we have a large piece of work to accomplish, we do not try to complete the task all at once, but we do a little at a time until the whole is finished. When one has been in the habit of worrying for some years, he must not expect to relieve himself of worrying in the twinkling of an eye. It means re-education, the exercise of self-control. Let us begin with the little things that we worry about. As we gain the victory over the little things, we are ready for the greater tasks. With continual progression day by day in conquering the things we worry about we are lifted above all our loads of

care before we know it. Always remember that the world went on before we came into it, and it will go on after we leave it. Therefore, what is the use of worrying?

### A COUNTERFEIT FOR THE GENUINE

One great ambition of men and women seems to be substitution of some thing for nature. This is manifested in a great many ways. Something artificial to take the place of nature in the physical make up of man and women is very common. This is specially noticeable in women. Hair switches, artificial teeth, a manufactured complexion, broadening or narrowing of the hips, compression of the waist, giving that wasp like figure, and the pinching of the feet with small shoes. These are some of the means by which the body is moulded and fashioned into shapes never intended by nature. The human form as naturally made is the very type of beauty itself, but when pampered with the devices of man it ceases to retain the beauty. The great amount of damage inflicted upon the system must also be considered. Many women who are enduring a miserable existence have brought on these conditions by destroying the body with these various devices. When we learn to leave nature alone in her work, we will suffer less from abnormal conditions of the system.

A substitute for the genuine is manifested in the present-day methods of infant feeding. The natural food of the infant is the mother's milk, but how many of these helpless little ones have access to the natural source for their food, in this manner gaining a good start in life. The fashionable mother thinks too much of her social functions. She likes her theatres too well to give up the time that would be necessary for the nursing of her infant during the first twelve months of its life. The infant is therefore put upon cow's

*(Concluded on Page 192)*



# General Articles



## How to Prevent Boils

ALFRED B. OLSEN, M. D., D. P. H.

A BOIL, also known as a furuncle, is an acute localized inflammation of the deeper tissues of the skin, and often results in softening of the structures, and consequent formation of a small abscess which burrows its way to the surface, and discharges an infectious material known as pus or matter. After entirely getting rid of the pus and destroyed tissue, the wound heals, leaving a small scar.

### LIFE HISTORY OF A BOIL

The most important predisposing cause is loss of tone, loss of vitality, and impoverished blood; in a word, a certain degree of ill-health. Lowered vitality means a serious depletion of the resistive forces, or natural defences of the body, which renders it more liable to the invasion of germs of one sort or another. The direct exciting cause or immediate agent in the production of the boil is a pus germ. The door of infection is usually a slight wound such as a scratch, pin prick, or some other seemingly insignificant wound of the skin, or possibly, in some cases, the opening of one of the fat glands of the skin. Now the microbes of disease are almost omnipresent, and oftentimes abound on the surface of the skin, but as long as they remain on the surface little harm results, but when they get through the skin, and into the deeper tissues without being destroyed, they begin to multiply, producing various poisons known as toxins, which are destructive to living matter. As soon as the germs enter an attempt is made to destroy them, and thus prevent the formation of a colony of these intruders; but if there is not sufficient vitality in the living

tissues to bring about the destruction of the invading enemy the next best course is adopted, and that is, to shut off the offenders from the surrounding healthy tissues, and thus limit their growth and the harm they can do. To form a wall of protection against the death-producing germs countless numbers of white blood cells, which Metchnikoff has aptly termed "soldiers," are rushed to the spot from all sides, thus quickly surrounding the germs and preventing their spread among the neighbouring tissues. At the same time local tissue cells proliferate and multiply, thus assisting in the fight against the intruder.

But the germs having already gained an entrance, very soon their harmful effects are observed in the production of a hard, painful, more or less cone-shaped swelling, which is both red and tender. The living tissues which are invaded are soon destroyed, as well as a very large number of the white blood cells which have been brought in contact with the germs, and have laid down their lives on behalf of the body. The swelling enlarges, softens, and soon the presence of fluid is detected, and after a time, unless it is lanced, the abscess breaks and discharges a yellowish, infectious matter, at the same time bringing relief from pain. Later on the "core" sloughs away, after which healing takes place.

### THE CAUSES

Anything which materially interferes with health and diminishes the life forces of the body must be looked upon as the most important of the predisposing causes.

But there are other factors which require consideration, and chief among these is the question of cleanliness. It is a fact that soap and water does not agree with germs, and where it is used freely and vigorously so as to keep the skin in a clean condition there is less danger of germ invasion, even though there may be enfeebled health. Rigid cleanliness, not only of the face, but equally of the hands, neck and, indeed, all parts of the body is essential to success in avoiding boils.

Another important factor is an abrasion of the skin which is only too frequently brought about by scratching with finger nails marked for a funeral. Even though the skin itself may be clean, such finger-nails, with more or less distinct "bands of mourning," are always reeking with germs which are capable of causing boils or carbuncles, not to mention still more dangerous disorders. Itching is usually a sign of uncleanness either of the skin superficially or of the blood and tissues internally. But anything which scratches the skin and causes an abrasion such as the roughened edge of a worn collar is almost equally dangerous. This explains why boils in the region of the neck are so common.

#### THE TREATMENT

It is sometimes possible to abort a boil, that is, to prevent its further development before the abscess is formed. Cleanse the threatened skin with soap and water, and the application of an antiseptic dressing such as a hot boric acid compress. Cover the compress with a piece of oiled silk or a piece of gutta-percha, and then apply a suitable bandage to keep it in place. Another excellent dressing consists of a piece of absorbent cotton or folded lint of proper size and thickness, which has been soaked in a solution of six ounces of glycerine to which five drachms of boric acid have been added. This dressing is also covered with some impervious mate-

rial such as gutta-percha. Painting the reddened skin with tincture of iodine, diluted carbolic acid, or silver nitrate, may also abort the boil. Ordinary poultices and fomentations should be strictly avoided since they almost always produce more harm than good by spreading the infection.

It is extremely necessary to bear in mind that the matter from a boil is always infectious and consequently must be carefully destroyed so as to prevent further mischief. It is necessary to protect the surrounding skin, not only by keeping it clean, but also by the application of some one of the antiseptic measures mentioned in order to prevent further infection.

#### SOME PREVENTIVE MEASURES

Anyone who has suffered from boils requires a change of air if possible, and an active, invigorating life with plenty of fresh air and outdoor exercise. The natural defences of the body require strengthening. If the patient is suffering from some constitutional disorder such as diabetes or Bright's disease, then it must be treated as required. Either disease makes a person more liable to boils. Tonic baths of all kinds are always in order, and every possible effort should be made to maintain activity of the bowels. Constipation means a varying amount of autointoxication which poisons the blood and lowers vitality. When a person is suffering from a crop of boils, a disorder known as furunculosis, it is well to administer a mild saline purge or saline enema, in order to keep the bowels open.

Naturally the diet is not an unimportant matter, for the strengthening of the vital forces depends very largely upon the quality and quantity of the food supply. It is a great mistake to rely upon alcoholic stimulants or the numerous medicinal so-called tonics which are advertised so freely nowadays. Plain, wholesome,

nourishing food is the best tonic. Fruit especially should be taken freely, either fresh or stewed. If this is done, it is rarely necessary to give any further atten-

tion to the bowels, for the fruit itself is a mild, gentle laxative, and its wholesome salts and acids do much to purify the blood.

## Food Reform

SOME persons have the idea that to discard the use of meat is the acme and whole thing in food reform. But there are other habits even more pernicious that are in vogue, and which cry out for reform. For instance, the ordinary bill of fare at hotels is an abomination. Such a mixture and conglomeration as the average man swallows, and the manner in which he bolts it down are enough to kill the whole fraternity of hotel-fed men in a week if it were not for the wonderful patience and endurance of the human system and the merciful care of a long-suffering Providence, which holds men in being in spite of their awful ways,—soups, salads, vegetables, entrees, roasts, pickles, hot sauces, milk, tea, oysters, shrimps, fruits, puddings, pies, coffee, cigars, grease, condiments, drinks, ices, hot stuff, etc., etc., not eaten,

not chewed, and decently swallowed, but gulped down, washed down, jammed down, any way to get them down.

Someone comes enough to himself to say, "I will cut out the meat," and then he imagines he has done the whole thing, and wonders why he does not get well, and those who see him laugh at his vegetarianism. Thousands of people each year are reaping the practical benefit of rational and hygienic diet. Not a man or woman ever undertook the work of reform in diet in a scientific and reasonable manner and did not receive great benefit from so doing. Vegetarianism, like every other good cause, deserves to be judged upon its merits when rightly presented, and not by the caricatures and abuses of it in the hands of ignorant and inconsistent professors of a cult or a fad.—*M. S. Journal.*

## Animal and Vegetable Food

THAT animal food renders man strong and courageous, is fully disproved by the inhabitants of Northern Europe and Asia, the Laplanders, Samoides, Ostiaces, Tungooses, Brutas, Kamtschatdales as well as by the Esquimaux in the northern, and the natives of Terra del Fuego in the southern, extremity of America which are the smallest, weakest and least brave people of the globe although they live almost entirely on flesh and that often raw. Vegetable diet is as little connected with weakness and cowardice as that of animal matters is with physical force and courage. That men can be perfectly nourished and their bodily and mental capabilities be fully developed in any climate by a diet

purely vegetable, admits of abundant proof from experience. In the periods of their greatest simplicity, manliness and bravery, the Greeks and Romans appear to have lived almost entirely on plain vegetable preparations. Indifferent bread, fruit, and other produce of the earth are the chief nourishment of the modern Italians, and of the mass of the population in most countries of Europe, of those more immediately known to ourselves the Irish and Scotch may be mentioned, who are certainly not rendered weaker than their English fellow subjects by their freer use of vegetable elements. The Negroes, whose great bodily powers are well known, feed chiefly on vegetable substances, and

the same is the case with the South Sea Islanders whose agility and strength were so great that the stoutest and most expert

English sailors had no chance with them in wrestling and boxing.—*Lawrence on the Natural History of Man.*

## Massage in Disorders of Digestion

IN no class of cases has massage proved so uniformly valuable as it has in functional derangement of the digestive organs and constant increasing experience of its employment, both alone and in combination with rest and appropriate diet, in a very large number of cases, has convicted the author of its superiority over any other plan of treatment in many very serious conditions of mal-assimilation, whose origin could be traced to primary dyspepsia in one of its many forms. The indirect action of massage as a substitute for exercise, when practiced upon the muscles, although exceedingly valuable in promoting tissue change, oxidation, and excretion of waste products, is not the only way in which it proves useful; for while, by general massage of the body the congestion of internal organs may be relieved, appetite improved, and the powers of ingestion increased, the direct effects of massage of the abdomen are more remarkable and far-reaching, and when practiced purposively, either alone or in combination with general massage, the results are most remarkable and satisfactory. The knowledge that abdominal massage is useful in derangement of the digestive function is by no means of recent date, but its scientific application based on experimental acquaintance with the effects produced on absorption, secretion, innervation and nutrition is comparatively recent, and although abdominal massage may have been employed from time immemorial the reasons why its use should prove beneficial have only been investigated within the last few years and afford a striking example of scientific experiment confirming popular experience. It may fairly

be said that local massage of the abdomen acts mechanically, physiologically, and chemically. Mechanically and directly by removing the contents of the one part of the gastric intestinal tract into another, as when matters are forced from the stomach into the small intestine and vice versa; or as when the passage of faecal matter is mechanically hastened by actual kneading along the course of the intestine. By the extrusion of the contents of the gall bladder as in digital manipulation for the removal of gall stones or by the relief of intestines by careful kneading with or without injections, which last proceeding has been successfully practiced and reported by Buch, Putnam and others. Physiologically by improving the nutrition of the muscles of the abdominal walls and of the intestines themselves, promoting peristalsis and increasing the rapidity of the portal circulation through the liver and of absorption from the stomach and intestines. Chemically, by improving the blood-supply of the organs, thus influencing the quality and quantity of the secretions containing the active principles necessary to digestion.—*A. Symons Eccles, M. B.*

THE work of the skilful cook is as potential for human welfare as is the work of the physician or the surgeon for often culinary skill may save us from the physician's potion or the surgeon's knife. Is there not equal responsibility of life and death? Certain it is that more people die of bad cooking than of either bad medicine or bad surgery. Cooking is a noble science, and need not blush among the other sciences."—*Youth's Companion.*

# Thanatopsis

To him who in the love of Nature holds  
Communion with her visible forms, she speaks  
A various language; for his gayer hours  
She has a voice of gladness, and a smile  
And eloquence of beauty, and she glides  
Into his darker musings, with a mild  
And healing sympathy, that steals away  
Their sharpness, ere he is aware. When thoughts  
Of the last bitter hour come like a blight  
Over thy spirit and sad images  
Of the stern agony, and shroud, and pall,  
And breathless darkness, and the narrow house,  
Make thee to shudder, and grow sick at heart;  
Go forth, under the open sky, and list  
To Nature's teachings, while from all around—  
Earth and her waters, and the depths of air—  
Comes a still voice—Yet a few days, and thee  
The all-beholding sun shall see no more  
In all his course; not yet in the cold ground  
Where thy pale form was laid with many tears,  
Nor in the embrace of ocean, shall exist  
Thy image. Earth, that nourished thee shall claim  
Thy growth, to be resolved to earth again,  
And, lost each human trace, surrendering up  
Thine individual being, shalt thou go  
To mix forever with the elements,  
To be a brother to the insensible rock  
And to the sluggish clod, which the rude swain  
Turns with his share, and treads upon. The oak  
Shall send his roots abroad, and pierce thy mould.

## House Fly as a Carrier of Disease

PEOPLE have various notions about these insects. The fly has been occasionally praised in fables and poetry. In short, it has not been looked upon as an injurious insect. The popular belief among us is that God has created all things for our benefit, and as such these creatures serve an important part in the economy of nature. But these and like creatures are intimately connected with our miseries and misfortunes. People in the past have always looked upon these things with indifference and blamed their fate.

It will be worth while to give here an illustration of what silly notions people have about these insects. The Mahomedans (particularly the Patan of North Gujarat) believe that in one wing of the fly there is misery, and in the other there is happiness. They further believe that it has a tendency to fall in the drinkables on one side so as to dip the wing of misery only; so whenever a fly falls into the drinkables they give it a second complete dipping so as to immerse both the wings to neutralise the effect of misery.

The feet of the fly have at the end light coloured pads with sticky hairs and claws. It uses the claws when it has to rest on a rough surface; and when it has to rest on a smooth surface like a glass it makes use of the pads, its action being mainly adhesion and not suction.

The greatest disadvantage a fly has from these pads, is this, that when they get sticky it cannot move them very freely, particularly when foreign bodies are attached to them. These pads are subject to being clogged up with foreign matter like the excreta, vomiting matter, etc., every now and then; consequently it has to clean its feet very often. One can imagine how his boots ball up with mud when he has to walk on muddy roads

made worse by rains. The fly is subjected to such inconveniences all its life, and consequently it is required to clean its feet every now and then particularly when it has to support itself on slippery surfaces. When these adhesions of foreign matter are too sticky to be ordinarily rubbed off, it laps them off and this afterwards passes off in its excreta.

Thus microscopic bodies of all sorts including those of disease are carried away from place to place on the feet of the fly. Though such bodies cannot be seen by the naked eye, they are constantly present there. One is naturally inclined to disbelieve this, firstly, because the claws and the pads are very small; secondly, it is difficult to observe how the fly uses and controls them, and thirdly, the operation of their movements and transference of adhesive septic bodies on them take place in a very short time, something like a second or half a second. But these truths can be verified by any body with a small amount of careful observation and experiment.

Unfortunately the transference of disease-germs from the feet of the fly is not the only way in which it can do us harm, for this will appear as nothing when we shall take into account what wrong it is capable of doing through its excreta.

The fly has a very weak digestive power, so only those substances which can be dissolved in these weak secretions are absorbed and the others are excreted as such. As a result of this fact, a fly has to eat heartily for its maintenance. The fly swallows nearly half its own weight at a single meal. In short it has to swallow more than its own weight during the course of the whole day. In proportion as its appetite is enormous, so also it evacuates very often. It has to evacuate every few minutes. Spores of many die-

eases pass through its bowels without, in the least, being affected by its digestion. Spores of any kind swallowed by a well-fed fly appear in about an hour or so in its excreta in an uninjured condition, so that they readily germinate afterwards.

To have some idea of the excretions of the fly, one has to look to the glass windows, walls, chandeliers, verandah posts, wooden frames of windows, cornices, strings hung from the ceilings and such other resting places. One is simply struck with the number of fly specks he observes in the best kept houses. The largest and the darkest coloured spots only are visible; the light-coloured and the transparent ones often escape detection. The fæcal matter passed by a fly is dangerous when it has access to a diseased, rotten, or a foul subject. The flies have, therefore, to be particularly guarded against, when there is any infectious disease in the neighbourhood. The excreta of certain intestinal diseases like typhoid, dysentery, cholera, etc., have peculiar odours which attract the flies towards them. They greedily prey upon these things; thus they swallow the disease germs by millions and pass them as such through the excreta.

The fly gets into or on almost everything we eat or drink. This fact is not only disgusting but positively dangerous, due to the introduction of disease germs into our bodies. This danger is not imaginary but real, and many diseases start in this way.

Any amount of evidence can be put forth to show that flies, having come in contact with the diseased material, have afterwards by their contact with persons or their food, probably caused the disease that followed. Many histories may be shown that would amount to the strongest kind of circumstantial evidence. Many diseases increase and decrease with the prevalence of the flies, in precisely the

same manner as they would if the flies were the inoculating agency.

Such circumstances fully authorise us to blame the fly for transferring almost any infectious disease that occurs in the fly season. In any town or village the population of flies increase to an enormous extent during the summer season owing to the high temperature. Their number decreases in cold season and for this reason they are less numerous in the cold countries. This fact when coupled with the food habits of the fly, at once brings to our mind what an important part the fly plays in the affairs of mankind, particularly as "carriers of disease." This will go to prove that the character of the house-fly is of greater significance to us than is commonly thought. It has really something to do in turning of the wheel of life. Though it does very little in keeping it going it does much toward stopping it altogether.

The fly is the chief agent in spreading the disease because of its great power of locomotion. It flies to considerable distances at a vary rapid rate of speed. Boats, trains, animals and human beings carry it to long distances. The wing muscles of the fly are heavier in proportion than those of other insects of its order, so, it can fly for a long time without getting tired. We can test this by keeping it on its wing in a room. This will go to prove that an active and adventurous insect like the fly, when it carries the disease germs, will quickly spread them far and wide.

Most of the diseases have for their origin small microscopic germs. They enter into and grow in our bodies destroying the tissues or poisoning us with their excretions. These germs are brought from the sick to the healthy by those hosts which are large and capable enough to carry them if an opportunity is given to them. Combine this fact with the habits of the fly, and at once see what an important part it plays as "a carrier" of human disease germs.—*Indian Medical Journal.*

## Look Pleasant, Please!

"LOOK pleasant, please!" the photo expert told me, for I had pulled a long and gloomy face; and then let a wide, glad smile enfold me and hold my features in its warm embrace.

"Look pleasant, please!" My friends, we really ought to cut out these words and put them in a frame; long, long we'd search to find a better motto to guide and help us while we play the game. Look pleasant, please, when you have met reverses, when you beneath misfortune's stroke are bent, when all your hopes seem riding round in hearses—a scowling brow won't help you worth a cent. Look pleasant, please, when days are dark and dismal and all the world seems in a hope-

less fix; the clouds won't go because your grief's abysmal, the sun won't shine the sooner for your kicks. Look pleasant, please, when Grip—King of diseases, has filled your system with his microbes vile; I know it's hard, but still, between your sneezes, you may be able to produce a smile. Look pleasant, please, whatever trouble galls you; a gloomy face won't cure a single pain. Look pleasant, please, whatever ill befalls you, for gnashing teeth is weary work and vain.

Look pleasant, please, and thus inspire your brothers to raise a smile and pass the smile along; forget yourself and think a while of others, and do your stunt with gladsome whoop and song.—*Walt Mason in Ladies Home Journal.*

## Correcting Heredity

NOT so long ago people lived in abject fear of the boggy of physical inheritance, for they believed that the sins and weaknesses of the father were visited in the most literal sense upon the children. They thought that the law was an iron one from which there could be no appeal. We are wiser now, and happier, for we have found out that in the matter of disease heredity does not determine our fate, but merely marks an avoidable tendency.

Just as the poor man's son may become a millionaire, so the sick man's son may become a man rich in health and strength; although in either case the man concerned will have to work hard and fight many battles. To the human being determined to win the prize of health, the knowledge of inherited tendencies to disease will be in itself an advantage. Being forewarned, he is forearmed.

A person who knows that his mother and perhaps an aunt or two have died of tuberculosis, will from the beginning throw up defenses against that particular enemy.

He will live day and night in fresh air, eat suitable food, wear proper clothes, and so live that his inherited tendency will grow yearly less, until by and by he is in no danger of contracting tuberculosis. He did not *inherit* it; he never *had* it; and finally, by sensible living, he has eliminated the disposition toward it from his tissues.

In this fight against inherited physical tendencies, we not only gain health for ourselves, but benefit those who are to follow us. The man who succeeds in eradicating his own tendency to gout is likely to have children still less liable to the disease than himself, and so on from generation to generation. It is certain that true wisdom for ourselves as well as true love for those who are to come after us consists in recognizing our physical weak spots and in making every effort to strengthen them.—*Selected,*

"AN unkind word falls easily from the tongue, but a coach with six horses can not bring it back."

# Anatomy and Physiology

## The Blood Vessels

THE blood vessels consist of the arteries, veins, and capillaries. The arteries are cylindrical tubes that convey the blood from the heart to all parts of the body. The veins bring the blood from the various parts of the body back to the heart again. The capillaries are the connecting link between the arteries and the veins.

An artery and a vein are very much alike yet with some differences which we will point out. An artery is divided into three main coats. These are an outer coat, a middle coat, and internal coat. The outer coat is stronger and of a tougher texture than the middle coat. The middle coat is made of muscular and elastic tissue which makes the artery noncollapsible. The inner coat is moist, smooth, and glistening. The three main coats are again subdivided.

The vein is arranged similarly to this with the exception that the middle coat is thinner and contains less muscular and elastic tissue. The veins have valves which the arteries do not. The office of the veins is to absorb and convey the blood from any part of the system back to the right auricle of the heart.

The capillaries differ from the arteries and veins in that they are smaller and do not contain an outer and middle coat, but only one coat. It is in the capillaries that the most important changes of the blood occur; the change from arterial to venous blood. It is from this system that the endless variety of material is supplied to the tissues of the body and for glandular secretion and nervous absorption.

The artery leading from the left ventricle of the heart to the various parts of

the body is called the aorta. Before it divides into the common iliacs it distributes branches to the heart, head, and arms, bronchi, oesophagus, stomach, liver, spleen, pancreas, kidneys, and intestines. From the common iliacs it breaks up into external and internal iliacs. The latter furnishes blood to the external muscles of the hip and pelvic organs. The external iliac continues down the leg as the femoral artery which soon changes its name to the Popliteal which divides into the anterior and posterior tibial. Thus the blood is brought to the foot. These vessels which we have mentioned supply the abdominal and pelvic organs and all of the muscles of the lower extremities with blood. The arm is furnished with nourishment from the subclavian artery which changes its name twice and divides before reaching the hands.

The blood is returned from the feet by a double venous system, a superficial and deep set of veins. These two sets unite at the upper part of the thigh and form a larger vein which unites with other veins until the blood is emptied into the right auricle of the heart by the inferior vena cava. The blood is returned to the heart from the hands in a very similar manner. The blood is supplied to the heart by an artery branching off from the aorta called the carotid artery. The blood is returned from the head by the jugular veins and by uniting with the subclavian vein from the arm forms the superior vena cava, emptying into the right auricles of the heart, the same cavity that receives the inferior vena cava from the lower extremity.

The blood vessels that go to and from the lungs are some times called the lesser circulation. It leaves the right ventricle of the heart by way of the pulmonary artery which distributes the blood to the air sacs of the lungs, where it is purified and returned to the left auricle of the heart by way of the pulmonary veins.

There is another part of the circulation that performs a very important function in our nutrition. It is called the portal circulation. The digested food is absorbed

from the digestive canal by branches of the portal vein from whence it is taken to the liver. From the liver it is taken to the inferior vena cava. It is in this manner that the food which we eat finds its way into the blood which is distributed to all the cells of the body, nourishing them.

Thus the blood is carried to the various parts of the body by means of these little tubes that have different names in the various parts of the body.

## The International Congress of Tuberculosis

THIS meeting was held at Rome, Italy. A great deal of importance was attached to the gathering as it was the expression of the advances that have been made in the prevention and cure of this scourge of humanity. The French and the Italians were most numerous at the congress. The Germans came next; while the English speaking representation was conspicuous by its absence.

One thing that was discussed quite thoroughly has attracted much attention for some years. It is the relation of bovine and human tuberculosis. In other words, is it possible for tuberculosis of the cow to be communicated to the human family? This is a question of vital importance to us as it would account for a considerable portion of the spread of this disease. Rare meat, cream, butter and milk unless subjected to some means of sterilization would be great factors in the spread of the "great white plague."

In years past both sides of this question received adherents from specialists in this line. Some taught that the organism in the cow was entirely different from the organism found in man. Also the disease in both was not identical. The consensus of opinion of this congress held at Rome

was such that they drew up the following resolutions.

Resolved; First, the prevention of tuberculosis must principally be directed against the supression of contamination from man to man, and principally in the family.

Second, The contamination of man by bovine infection is of less frequency. Nevertheless it is necessary to continue all measures against infection of bovine origin.

In view of this might we not reasonably expect to get this disease from un-cooked meat, milk butter and cream. It ought to make us more careful in the preparation of these foods for human consumption. Tuberculosis is a very insidious disease. It makes itself manifest at times where we least expect it and when we cannot account for it. It would not be at all unreasonable to charge such cases to infection by these animal products.

The very foundation of the whole commonwealth is the proper bringing up of the young people.—*Cicero*.

Give us good motherhood and good parentage conditions, and I have no despair of the future of this or any other country.—*John Burns*.



## Coco-Nut

( *Cocos nucifera* )

ITS habitat is most probably the East Indian Archipelago, but it is commonly cultivated in all tropical countries. There are three varieties cultivated in India and Ceylon: the King, which is very good; the Dwarf, much sought after in Ceylon for gardens; the Brahmin, with large nuts, principally esteemed for its milk. The oil is used as food, and must be eaten soon after its extraction as it quickly decomposes. It is obtained in the usual way by expression, or boiling and skimming. The kernel is often preserved in sugar and made into various sweetmeats. When "young" the kernel is a delicious food, being easily separated from the shell with a spoon, and when ripe is grated and added to puddings, etc.

The *young* coco-nut has a large cavity in the centre of the kernel containing the liquid commonly called "milk," which is considered very refreshing and nourishing, and is used as a substitute for water. It is often substituted for cow's milk in the preparation of puddings.

The white outer part of the kernel is, when dried, known as "copra." In India, copra is eaten with parched rice; or made into sweetmeats. The grated kernel produces a sweet milk, used instead of cows' milk in cookery.

Another product of the palm is "sugar," which is obtained in the following manner. When the spathe is about 2 feet long and 3 inches thick it is tightly bound with strips of young leaves to prevent expansion, and the point cut off transversely to

the extent of one inch. The cut end of the spathe is gently hammered in order to crush the flowers thereby exposed, and to determine the sap to the wounded part. The stump is then bound up with a broad strip of fibre. This process is repeated morning and evening for several days, a thin layer being shaved off on each occasion and the spathe trained to bend downward. This operation is continued from five to fifteen days. The dropping of juice will show that it is ready to yield toddy. The end of the spathe is then fixed into an earthen vessel, to catch the oozing liquor. A single spathe will continue to yield toddy for about a month, during which time the tree is climbed twice a day and the juice collected. The process of binding and cutting the spathe an inch lower down is repeated each time the juice is collected. Three to four quarts is the average quantity obtained in twenty-four hours, and the tree continues to yield from six months to a year. Some times this fluid is converted into what is called "nira" by lime-washing the collecting vessels in order to prevent fermentation, and then sold as a sweet and refreshing drink.

When the juice is intended to be made into "jaggery" (sugar), the earthenware vessels in which it is caught are powdered with lime in order to prevent fermentation, and the time of collecting is early in the morning. Jaggery is prepared in the usual manner, by boiling down and evaporation. Eight gallons of juice boiled over a slow fire yield two gallons of jaggery, which, when dried, is tied up in small quantities in dried plantain leaves, and kept for sale.

This sugar has a delicious nutty flavour and fragrance as unique as maple sugar. Melt this sugar, pour on grated ripe coco-nut, and a delicious sweetmeat is produced.

## Recipes

### COCOANUT CONGEE

Ingredients:—Raw rice 3 cupfuls; 1 cocoanut; 10 cupfuls of water; 1 saltspoonful of salt. If you can get broken rice it will be better than whole.

Mode.—Clean and wash the rice well; soak in water for 1 hour, boil 8 cupfuls of water, when boiling add the rice and boil till 3 parts done; boil the scraped cocoanut in two cupfuls of water, squeeze well, strain and add to the boiling rice, put in the salt and cook till done, and thick.

### COCOANUT BISCUITS

Ingredients:—2 eggs; 8 oz. of sugar; 6 oz. of flour; 1 cocoanut;  $\frac{1}{4}$  teaspoonful of white salt; a little butter.

Mode.—Grate the cocoanut, sift the flour and sugar, beat the eggs white and yolks separately, mix the cocoanut, sugar, salt, and yolks, add the whites and flour in alternate spoonfuls mixing all the while, rub a tin with butter; take up lumps the size of an egg in your hand, place on the tin and press into the shape of a small biscuit; in a raw state it is very sticky, but when baked is as dry as any biscuit; bake for 10 minutes turning once.

Time 10 minutes.

Sufficient to make 12 biscuits.

### COCOANUT CONJEE PUDDING

Ingredients:—1 teacupful of cocoanut conjee; 4 eggs; 1 tablespoonful of marmalade; a little salt.

Mode.—Mince the marmalade, beat up the eggs; mix all well together and bake in a buttered mould.

### DIRECTIONS FOR DRAWING COCOANUT MILK

You must grate the cocoanut and put it in a saucepan with a cup of water, cover closely and place on a brisk fire; when boiling remove from the fire and pour it into a bowl, mash the grated cocoanut against the sides of the bowl with the back

of a spoon, then pass through a strainer and it is ready for use.

### CHEAP COCOANUT BREAD PUDDING

Ingredients:—1 lb. of bread crusts; 1 handful of cashewnuts; 1 cocoanut; 3 eggs; 4 oz. of plums; 2 tablespoonfuls of sugar; 1 teaspoonful of baking powder (if on hand).

Mode.—Soak the crusts in boiling water till soft, slice up the cashewnuts, extract the cocoanut milk; beat up the eggs; squeeze out the water from the crusts and mash well, add all the other ingredients, the eggs last, mix well, and pour into a dish rubbed with ghee and bake.

## THE RICE CURE

DAVID PAULSON, M. D.

DR. L. DUNCAN BULKLEY, the noted New York skin specialist, has recently called the attention of the medical profession to the very surprising results that he has obtained in eczema and other severe inflammatory skin troubles by restricting the patient absolutely to a rice, bread, butter and water diet for five days.

After two or three days of this diet the change that is produced in the patients is sometimes astonishing. Dr. Bulkley also forbids the patients to use coffee, tea and chocolate.

It is well for our readers to be informed that living almost exclusively on rice for a few days is equally beneficial in some forms of sick-headache, hyperacidity of the stomach, auto-intoxication, and other digestive and nutritional disorders.

It may be eaten in the ordinary cooked form with a little cream added or it may be made into cream rice pudding, or better still, the toasted rice flakes which are now on the market, or toasted rice biscuits and butter.

Stewed prunes or any other sub-acid fruits, raw or cooked, can be used very advantageously at the same time. After a few days the diet may be extended, but it is well to continue for some time to make a liberal use of rice in the daily dietary.

# : Mother and Child :

## What the Child Should Know

WITH a strong body and well developed play instinct must go, in the fourth place, intimate self-knowledge. That our bodies are wonderful, God-given machines, our children must be taught, and that with them they may do whatever work they may decide upon in life.

Through the wise teaching of bodily and personal hygiene we reach the foundation for the expression of energy and enthusiasm. It is energy which makes the world go. Each child is endowed with an

abundance of it, but he must be told how to direct it wisely. In addition to these, he must, of course, be taught sympathy, ideals, and the inspiration which makes for aspiration and character. Inspiration must be taught as the will to do, and sympathy as an appreciation of things and of men.

Here, then, it is the woman in the home who determines what shall be the character of the new generation, and it is that which constitutes the fourth and perhaps the greatest thing that she does.—*Sel.*

## Diet of the Nursing Mother

THE diet of the nursing mother should not essentially differ from what would be considered to be a healthy one for her at any time. There is no special diet which, under all circumstances, is best for all nursing women during the period of their lactation. In the early days of the puerperium there is, as a rule, more danger of over-feeding than of under-feeding the mother. The tendency is to give too much solid food, with the result that when the secretion of the milk is being established the total solids are increased to a degree beyond the capacity of the still undeveloped digestive function of the infant. Infants in the early days and weeks of life thrive better on a milk that shows a high percentage of water in proportion to that of the total solids. A rule which has in my experience become almost an axiom is that the age of the individual infant is in inverse proportion to the need of a large amount of water in its food. A light and plentiful diet should therefore be given to the mother while

she is confined to her bed. This diet should consist of milk, gruels, soups, vegetables, bread and butter. When the mother is able to go out of the house again, and has resumed her usual habits, the quality of the diet can be very much increased, and she can have the usual variety of food represented by vegetables, milk, fruits, and cereals. There are no special kinds of food which are contra-indicated, provided we keep the food within the limits of the ordinary articles which commonly represent a plain but nutritious diet. It is very important for the nursing mother to have her meals at regular intervals, and during the early part of the lactation to take food somewhat more frequently than when she is not nursing. The additional meals as a rule should be made up of milk. She should receive as much milk as is compatible with her digestion, and should drink a plentiful supply before retiring at night. This wide range of food for the nursing mother has been recommended

with a purpose. The food of the nursing woman is without doubt closely connected with that which she provides for her infant. Various substances are eliminated by the mammary gland, and we should therefore impress upon mothers the importance of a carefully arranged diet when they are nursing. Certain vegetables and some times fish will in individual cases affect the milk and cause discomfort to the infant. We must, then, in every case, seek to determine which article of diet may cause disturbance in the special

woman's milk secretion, and eliminate that article. We should, however, be very careful not to prohibit this special article of diet from the regimen of a large number of women to whom it might be of benefit rather than of harm, simply because it has affected the milk of a few women. For the average a plain mixed diet, with a moderate excess of fluids and proteids over what she is normally accustomed to, will, as a rule, give the best results.—*T. M. Rotch, M. D., Harvard Medical College.*

## The Choice of Helpmeet, its Effect upon Society

SOCIETY is composed of families. And heads of families are responsible for the molding of society. If those who choose to enter the marriage relation without due consideration were alone to be the sufferers, then the evil would not be as great, and their sin would be comparatively small. But the misery arising from unhappy marriages is felt by the off-spring of such unions. They have entailed upon them a life of living misery; and though innocent, suffer the consequences of their parents' inconsiderate course. Men and women have no right to follow impulse or blind passion, in their marriage relation, and then bring innocent children into the world to realize from various causes that life has but little joy, but little happiness, and is therefore a burden. Children generally inherit the peculiar traits of character which the parents possess, and in addition to all this, many come up without any redeeming influence around them. They are too frequently huddled together in poverty and filth. With such surroundings and examples, what can be expected of the children when they come upon the stage of action, but that they will sink lower in the scale of moral worth than their par-

ents, and their deficiencies in every respect be more apparent than theirs. Thus has this class perpetuated their deficiencies and cursed their prosperity with poverty, imbecility, and degradation. These should not have married. At least, they should not have brought innocent children into existence to share their misery and hand down their own deficiencies with accumulating wretchedness from generation to generation which is one great cause of the degeneracy of the race.

If women of past generations had always moved from high considerations, realizing the future generations would be ennobled or debased by their course of action they would have taken their stand that they could not unite their life interests with men who were cherishing unnatural appetites for alcoholic drinks and tobacco, which is a slow but sure and deadly poison, weakening the nervous system and debasing the noble faculties of the mind. If men would remain wedded to these vile habits, women should have left them to their life of single blessedness to enjoy these companions of their choice. Women should not have considered themselves of so little value as to unite their

destiny with men who had no control over their appetites, but whose principal happiness consisted in eating and drinking and gratifying their animal passions. Women have not always followed the dictates of reason instead of impulse. They have not felt in a high degree the responsibilities resting upon them, to form such life connections as would not stamp upon their offspring a low degree of morals, and a passion to gratify debased appetites at the expense of health, and even life. God will hold them accountable in a large degree for the physical health and moral charac-

ters thus transmitted to future generations.

Men and women who have corrupted their own bodies by dissolute habits, have also debased their intellects and destroyed the fine sensibilities of the soul. Very many of this class have married and left for an inheritance to their offspring the taints of their own physical debility and depraved morals. The gratification of animal passions and gross sensuality have been the marked characters of their posterity which have descended from generations, increasing human misery to a fearful degree and hastening the depreciation of the race.—*Mrs. E. G. White.*

## The Child of To-day is the Man of To-morrow

How often do we stop and consider that we must depend upon the child of the present to move the world of the future? It is becoming a vital question in the civilized world. It is being impressed upon the minds of the great educators of the day that the child is the future professional man, tradesman, financier and farmer. What we are able to do to make better lawyers, physicians, carpenters, business men and farmers is not only our duty to our fellowmen but a benefit to the world at large. The child with a poor start in life is badly equipped for the battles of adult life. He who earns his living by the means of manual labour must have a strong physical make-up directed by a good sound mind. He who chooses the professions as a life occupation must have a strong, non-fatiguable brain, pushed by a good physique. We cannot attain the best mental and physical efficiency without receiving co-operation from those of experience when we are in our youth.

The earlier part of life is the time when impressions are received that last throughout the whole life period. It is the time

when character is being developed; a time that decides whether the life is one of usefulness or failure. How important it is that we should be interested in the welfare of the child.

Some boards of health have passed laws forbidding the marriage license to those who are physically unfit to procreate, or bring into the world, offspring. There is nothing that handicaps one in life more than to be afflicted with disease, or to have a weak constitution transmitted by diseased parents. Venereal diseases, imbecility, nervous conditions in the parents, have caused thousands of wretched lives.

The training of the child begins with its pre-natal influences. A great deal is being written and spoken to educate mothers in the care of themselves so that this period of the child's development will be as near ideal as it can be made. The diet, exercise, contentment of mind of the mother are factors bearing strongly on the early life of the infant.

In the large cities physicians are interested enough in the subject to start stations in the various parts of the city

where skilled instructors are located to teach the mother how to care for her child. Good wholesome milk is sold to the mothers at a low rate: mothers are taught how to modify the milk to suit the digestion of the infant. This has not only reduced the infant mortality, but has given a great many infants a better start in life.

Boys and girls are crowded in dark, dusty, dingy and ill-ventilated factories, where they spend about half their time. This amount of time spent under such conditions at this age makes them totally unfit for the duties of later life. Who has not witnessed the pitiable picture of lean, lank, palefaced, quite often deformed boys and girls file out of the factories at the meal hours. Instead of taking this time of their lives to blossom out into full manhood and womanhood they are compelled to earn their food. The laws of the land have taken this situation in hand and forbid an employer hiring boys and girls under certain age and at the same time it compels parents to send their children to school.

This does an incalculable amount of good in the preservation of the human race.

Another great factor in helping the future man is by training the mentally defective youth who are weak-minded. These are gathered in classes in our large cities and trained to quite a healthy state of mental vigor. Sometimes the very unpromising are made respectable and useful citizens in their community. This is a work that is receiving considerable attention at the present time.

An advanced step made in the direction of child welfare is the establishment of the "Childs' Bureau" in connection with the Government of the nation. This means that at the national headquarters there are men appointed whose business it is to look after the children of the country; men who will devise ways and means of meeting the issues so detrimental to the development of both mind and body in youth, and a nation can but eventually benefit by the introduction of such a department.

V. L. MANN.

## Book Notices

**INSTRUMENTS AND APPLIANCES FOR OPERATIONS,** BY R. H. CASTER, LT. COL., I. M. S. This is a very handy, compact booklet giving the choice of instruments for operations on the different parts of the body. It also gives short but valuable suggestions on surgical technique, operation room and anaesthesia. The glossary is very useful. The booklet on the whole is tastily arranged. It should serve its purpose excellently. Price, Re. 1. Thacker Spiuk & Co., Calcutta.

**EYES RIGHT,** BY JAMES M. MACPHAIL, M. A., M. D. It is a booklet prepared especially for the laity. By the avoidance of

technical terms this makes a valuable book for the people on the prevention of diseases of the eye. When we consider the amount of blindness caused by ignorance, it is at once known what an important place this booklet fills. We wish that India's millions were acquainted with the instruction it contains. Price, eight annas. The Medical Missionary Association of India, Santali Mission Press, Pokhuria, Gobindpur, Manbhoom, India.

**THE AMERICAN PRESBYTERIAN MISSION HOSPITAL'S YEAR BOOK.**

Miraj, Bombay Presidency, India.



# Abstracts

## SMALLPOX AND VACCINATION

IN November, 1910, an aged farmer, his wife, and an unmarried daughter, tiring of their old home in Ohio, decided to make a prolonged stay in Mexico City, and later in Marion County, Oregon, where two sons of the aged couple were in business. After visiting in Mexico City they left for Oregon, when the conductor in the car in which they were travelling discovered a patient just convalescing from smallpox, occupying a seat directly opposite them in the car. At the next station the patient was forced to leave, and without any attempt at disinfecting, or quarantining, or vaccinating the passengers, the train was allowed to proceed. The family arrived in Oregon on Thanksgiving day, 1910. The drama now moved swiftly. The mother at once gave evidence of a mild infection with smallpox. No medical aid was sought for her. On December 5 her husband was attacked with a virulent form of the disease, and died in two days, before the eruption had reached the stage of pustules. On December 7 the son whom they visited succumbed to a fatal attack, and on December 10 the unmarried daughter and the son's wife died of the disease. A small grandchild, aged four, was next attacked, but unfortunately, recovered frightfully disfigured. Three nurses were sent to the family before a diagnosis was made, only one of whom had been vaccinated. The two unvaccinated ones and a domestic employed in the house, who also had not been protected by vaccination, took the disease, but recovered.

The mother of the family, who had been vaccinated fifty-five years previously, escaped with so mild an infection that the

disease was not recognized. Of the remaining members of her family, her husband, son, daughter, and the daughter-in-law, none of whom had been vaccinated, succumbed rapidly to the scourge, and of the unvaccinated ones the only one left in the family who recovered was the little four-year-old boy, whose disfigured face will always stand as a most effective argument for the beneficial effects of vaccination.

This experience no doubt has been duplicated in other States. The apathy of many persons will make possible similar cases, until a strong demand by the informed and aroused part of the inhabitants of these United States will demand the rigid enforcement of compulsory vaccination, with no excuse for the conscience clause which exempts ignorant people in England.—*Lancet-Clinic*.

## THE BEST TIME TO BECOME A PARENT

IN the "*Eugenics Review*" for October, Dr. R. J. Ewart gives a summary of his investigations into the vital statistics of the population of Middlesborough, made to ascertain the influence of parental age on the offspring. He devotes his attention to the children of the working classes only, and bases his conclusions on their respective measurements, taking it as a rule that the taller class is a better human specimen than the less tall.

He finds that the mother produces her best girl before her twenty-fifth year, and her best boy in the twenty-six to thirty age period; the average being a little over half an inch above the mean height for boys, and a little under that figure for girls. The father has the best sons during

the thirty to thirty-five age period and not in the twenty-five to thirty period as with the mother. In respect to girls the results are not so uniform, though the same trend can be seen. With a father between thirty-one and thirty-five, and a mother between the twenty-five and thirty, we get a boy 41.87 inches in height, an excess of nearly two inches over the mean of those born before the twentieth year.

Among the very poor, in the middle and the most fertile of the reproductive periods the children tend to fall below the average. The reason he finds in the fact that the birth interval is shortest at the time of greatest fertility. He mentions that under proper conditions of rest, etc., "the majority of women, barring accidents, are in every way improved by child-birth. It appears as though the exuberant vitality of the growing offspring pervades through the tissue of the mother herself and makes for her well-being." He says that the expectancy of life of those born at the maturity of parents is about fifty years, and at the extremes is about half that figure.

In a natural state, the season of the year most favourable for conception seems to have been the spring, with the birth occurring in the following, January, February, or March, and the writer thinks that much benefit would accrue if the habit could be re-established through the agency of the will. A child so born has two summers to one winter, and has a better chance of life.—*M. S. Journal.*

### SLEEPLESSNESS AND ITS TREATMENT

DRUGS in the treatment of sleeplessness should be employed with the greatest caution. When insomnia occurs as an occasional result of some known violation of the laws of health, no account need be taken of it. Excessive fatigue and eating just before retiring are common causes.

There is also a simple insomnia due to empty stomach, which needs only a little hot milk to set things right. Flatulence or an overloaded colon may prevent sleep. The effects of tea, coffee, and tobacco are familiar to all. Strychnine, caffeine, and theobromine, when given medicinally, also cause insomnia. Mental excitement is a dispeller of sleep. The high arterial tension of kidney disease, arteriosclerosis, and digestive disturbances often cause persistent insomnia. Sleeplessness in old age is due to rigid vessels in the brain. On the other hand, insomnia due to weakness of the vessels, or rather of the nerves and muscles which should keep the vessels in tonic contraction, as in anæmia, in recovery from grippe and typhoid and in Graves's disease. These patients readily fall asleep sitting up, but when they lie down, such is the automatic dilation of the cerebral vessels that the brain is suffused with blood, and sleep is effectually prevented.

Each case must be studied on its merits. It goes without saying that sleep-producing drugs are not to be given indiscriminately. Look for and correct underlying causes. Drugs are to be regarded only as expedients, when they are used, while the cause is being sought out.

Somebody has said that no one ever suffers from insomnia who has to get up at six o'clock every morning. Of course this is too much of a witty generalisation, but there's a lot of truth in it, just the same.—*Therapeutic Medicine.*

MODERATE drinking is a delusive term. There is no amount of alcohol that can be considered safe to use as a beverage.

Any unusual mental strain may cause a moderate drinker to begin drinking heavily.

Heavy drinkers were once moderate drinkers, and many who now drink moderately will develop into regular toppers.—*Sel.*

# Practical Home Treatments

## Moist Abdominal Bandage

This is a water treatment that falls under various names. Outside of the title that we have used, we find "The Wet Girdle," and "Neptune's Girdle" often used. It is one of the simplest of hydropathic treatments and yet one of the most effective. It is so simple in its construction that any one can be taught to apply it, and there are very few contra indications to its use. It is not an unpleasant treatment at all. The first application may feel a little uncomfortable, but after several applications, the patient is loathe to do without it.

A linen bandage eight or nine inches wide and long enough to go around the body three times is used. This is wrung out of cold water at from 50 to 70 degrees. The colder the water, the drier the compress should be. This is wound around the body about four inches above and four inches below the navel. Around this is wrapped a flannel bandage twelve inches wide of one or two thicknesses, and surrounding all of this in special instances is fitted an impervious dressing of oil silk. When the cold is applied to the abdomen, a slight chilly sensation is manifested, but if the flannel covering is properly adjusted and the girdle is properly applied the patient soon experiences a pleasant, cool sensation. A feeling of comfort rather than discomfort is manifest.

The bandage is generally put on at night and removed in the morning. At times the girdle is worn both night and day. When it is removed in the morning the part covered with bandage should be sponged off with cold water and followed by brisk friction.

Benefit is derived from this remedial agent by its stimulative, sedative, and derivative action. The cold that is applied is a powerful stimulant to the abdominal organs by its influence upon the sympathetic nervous system. We can readily see the close connection that exists between the skin of the abdomen and the underlying organs when we note the extreme stiffness of the abdominal wall

in inflammation of the appendix. This is due to the nerve connection between the internal organs and the exterior. The girdle may be made a sedative or derivative measure by varying the degree of protection afforded.

There are a great many uses to which this hydropathic measure may be applied. It is one of the best means we have for combating insomnia. The linen bandage should not have too much water in it as this will prolong the chilly effect. The comfortable stage of the girdle should be noticed by the patient soon after its application. If the patient does not overcome the chilly sensation readily, it is well to precede the application of the bandage by a hot application to the abdomen. Patients will obtain sleep by this method when all other plans have failed.

Its effect in relieving constipation is almost marvellous at times. Patients whose stools are hard, dry, and difficult to expel, will oft-times in the resort to this curative agent, be passing stools of natural consistency in a period of a couple of weeks. This change is caused by the increase in the intestinal juice thereby increasing the fluidity or looseness of the stool.

Because of its derivative action it is used in chronic congestion of the stomach, liver, spleen and intestines, and if applied lower down on the abdomen, it relieves the pelvic congestion of women. A chronically congested organ suffers with an excess of blood. Unless this extra blood is removed, serious changes take place in the organ. Conditions of this kind are noted in indigestion, constipation, and disorders of the liver. The wet bandage withdraws the blood from these parts and relieves them of their extra burden.

It also acts upon the internal organs by stimulating the little nerves that contract the blood vessels, decreasing their calibre and thus forcing the blood out of the organ.

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## A NEW VETERINARY COLLEGE FOR THE PUNJAB

It is probable that a new Veterinary College for the Punjab will have to be built at Lahore, the site of the present College being required in connection with the King Edward memorial scheme for the extension of the Medical College Hospital.

## SANITARY SERVICE IN MYSORE

THE Mysore Government is to be congratulated on its decision to open a School for Hygiene at Bangalore for the training of candidates as Sanitary inspectors for the state. This is a wise step of the Mysore Government, and one which the Government of India should follow immediately.—*Practical Medicine.*

## INTERNATIONAL HYGIENE CONGRESS

At this Congress, which will meet in Washington in September, there will be a section on dietetic hygiene and hygiene physiology under the presidency of Dr. Russell H. Chittenden, of the Sheffield Scientific School, Yale University. The papers in this section will be from the world's foremost students of dietetics.

## TUBERCULOSIS PERSPIRATION INFECTIOUS

PROFESSOR Poxnet and Dr. Piery are advocating in high medical circles the startling doctrine that in a large proportion of tuberculosis cases, even what have been called "closed" cases, the bacilli in virulent form are passed from the body in the perspiration. They think that this explains the terrific sweats of tuberculous patients; that it is an effort of the body to rid itself of the germs. If this proves true, it will probably revolutionize our methods of caring for consumptives and preventing infection.

## HYGIENE IN CANADIAN SCHOOLS

At the sixth annual convention of the Association of School Trustees for the Province of Alberta held recently in Calgary, the most important resolution discussed was the request that instruction in hygiene be placed on the same basis as the other subjects in the school curriculum.

## A COUNTERFEIT FOR THE GENUINE.

(Concluded from Page 172)

milk, and the nurse is left to take full charge of the infant. The poor mother can resume her social functions, but what about the infant? Cow's milk is alright for calves, asses' milk for asses' colts, and goat's milk for kids, but these are not the proper food for the little man.

The mortality among the artificially fed babies is five times as great as among the babies brought up on mother's milk. In other words there are five times as many babies die when reared on cow's, asses' goat's, or the prepared milks. There are substances found in the mother's milk that aid in the digestion of albumin, others aid in the digestion of starches and fats. These substances are called ferments. They are of no benefit to the infant if taken in the milk of an animal of another species. It is true there are some women who cannot nurse their infants, but they are few. So here is another chance for mankind to come back to nature.

Artificial food for man is another line along which science is working to give us the counterfeit instead of the genuine. Think of eating a food put up by scientists. This shows the extent to which man attempts to furnish us something to take the place of that which nature intended. It is possible to make foods that are of the nature of certain foods after they have been acted upon by the various organs of the body, and made fit for absorption into the blood. Although there are times in disease when pre-digested artificial food can be used to advantage still it is not practical for one to live on such foods. The stomach and intestines were made to digest our food.

The farther we get away from nature the farther we get away from the conditions that assure us "a sound mind in a sound body."

# Two Excellent Cook Books

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